What is claimed, is

1. A method for automatically identifying tokens associated with an event in video sequences containing individual takes and extracting information contained thereon including the steps of:
- classifying the candidate regions into token or non-token,
- locating tokens in candidate regions,
- locating information on the token,
- interpreting the information on the token,
- performing a confidence analysis on the information to ensure that the information was interpreted correctly,
wherein the method further includes the steps of:
- detecting boundaries between individual takes,
- pre-selecting candidate regions in images of the video sequence following or preceding a detected boundary prior to the step of classifying the candidate regions, and
that the method also further includes the steps of
- merging information of consecutive images into a single, coherent set of information, and
- detecting changes in the visual appearance of the token, the changes signalling a particular point of an event, after the step of performing the confidence analysis.

2. The method of claim 1, **wherein** after detecting a boundary between individual takes a timer is set, upon time-out thereof the identification process is terminated.

3. The method of claim 1, **wherein** detecting boundaries between individual takes includes the steps of:
- creating a histogram from image properties for consecutive images,

- calculating the distance between filtered histograms of consecutive images,
- comparing the calculated distance to a preset threshold, and
- issuing a signal indicating a boundary is detected upon the distance exceeding the threshold.

4. The method of claim 1, **wherein** pre-selecting candidate regions in candidate images includes the steps of:
- defining a reference feature value set corresponding to tokens,
- scanning the image at varying locations using a suitably shaped scanning window;
- computing a feature value set for each scanning window location,
- comparing each feature value set with the reference feature value set, and
- ranking the scanning windows containing feature value sets according to their distance to the reference feature value set.

5. The method of claim 1, **wherein** classifying the candidate regions into token or non-token includes the steps of:
- calculating feature values from the candidate regions,
- comparing the calculated feature values to known classified feature values of reference images,
- assigning classifiers to the respective candidate regions, and
- assigning a classification confidence value to the classified candidate regions.

6. The method of claim 1, **wherein** locating tokens in the candidate regions includes the steps of:
- scanning the candidate region using a suitably shaped

scanning window,

- calculating coefficients describing the correlation between the scanning window and a reference image of a token,

- averaging the coefficients, thereby defining a matching confidence value,

- selecting the scanning window having the highest confidence value as candidate window.

7. The method of claim 6, **wherein** the scanning window and/or the reference image is decimated or interpolated in its spatial resolution prior to calculating the correlation coefficients, resulting in a corresponding number of pixels for the scanning window and the reference image.

8. The method of claim 6, **wherein** the candidate region is re-classified to non-token if the confidence value is below a preset threshold.

9. The method of claim 1, **wherein** locating information on the token includes the steps of:

- cutting a sub-image from the candidate image using size and position data from the token localization process,

- constructing a probability map of the sub-image describing the probability that a pixel of the sub-image belongs to information on the token, and

- selecting an area of the sub-image with maximum probability values.

10. The method of claim 9, **wherein** the probability is obtained by comparing pixel properties of the sub-image to pre-defined pixel properties belonging to information elements.

11. The method of claims 1 and 9, **wherein** interpreting the information contained on the token includes the steps of:
- rotating the selected sub-image area with maximum probability to bring the information contained therein into horizontal orientation,
- binarizing the probability map values of the sub-image area,
- filtering the binarized map, and
- performing an optical character recognition on the filtered map.

12. The method of claim 1, **wherein** a confidence analysis is effected by checking information extracted from consecutive images for consistency.

13. The method of claim 1, **wherein** merging information elements includes replacing mismatching information elements and/or information elements having low confidence with interpolated information elements.

14. The method of claim 1, **wherein** detecting changes in the visual appearance of the token includes the steps of:
- detecting and locating parts of the token subject to change by analysing visual features in candidate regions and comparing the visual features to pre-determined visual features of tokens,
- monitoring the change in visual appearance of the parts subject to change by comparing detected visual features in consecutive images, and
- outputting data describing the degree of change with regard to a pre-determined starting and/or end point.

15. The method of claim 14, **wherein** the visual features are translated into simplified models for analysis and monitoring.